



ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY

College of Architectural and Civil Engineering Department

An Independent Project on
Comparison between FIDIC and PPA Condition of Contracts for the selected
clauses

A Project Study Submitted to School of Graduate Studies in Partial
fulfillment of Masters' Degree of Engineering in 'Construction Technology
and Management'

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EXAMINER

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ABSTRACT

Construction contract general condition clauses have a major influence on the likelihood and degree of project success. This paper is about comparison between FIDIC and PPA Conditions of Contract. To achieve the objective of the study a desk study has been conducted to identify the similarity and differences of the clauses in FIDIC (1999) and PPA-ICB (2011) conditions of contracts and due to different limitations the study focuses on few of the clauses.

Consequently, interview questionnaires are prepared and distributed to Consultants, Contractors, Lawyers, concerned government bodies and individual professionals. Accordingly, from the feedback of the respondent, this paper uses qualitative method of analysis, frequency method, and I come up with my conclusions.

The major findings and recommendations of the study are (1) Most of my respondents agreed that FIDIC provisions are the one which clearly indicate the rights, obligations, and remedial rights of each contracting parties.(2) our local conditions of contract are in some way adapted from FIDIC conditions of contract in such a way to keep government , public interests and also to substantiate control of the government financed projects.(3) Our condition of contract has to be upgraded with certain time, because it has some short coming and gap with FIDIC Condition of contract.

Finally, I emphasis that because of the limitations faced during the study the conclusion given on this paper are not binding and it is used for educational purpose only. Hence I recommend further detailed study has to be conducted on the topic to clearly conduct holistic conclusions that all could explore a positive output.

Table of Contents

ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
ABBREVIATIONS	vi
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background	1
1.2 Statement of the problem	2
1.3 Objective of the study	3
1.4 Significance of the study	3
1.5 Limitation of the study	4
1.6 Paper layout.....	4
CHAPTER TWO: LITERATURE REVIEW	5
2.1 The Law of Contract	5
2.2 Construction Law	6
2.3 Basics of Contract	7
2.3.1 Contents of the contract.....	8
2.4 Construction Contract	13
2.4.1 Construction Contracts Types	14
2.5 Contract Documents According to Conditions	16
2.5.1 The Contract Agreement	17
2.5.2 The Letter of Acceptance	17
2.5.3 The Letter of Tender.....	17
2.5.4 Particular Conditions	17
2.5.5 General Conditions	17
2.5.6 The Specifications	17
2.5.7 The Drawings	18
2.6 Conditions of Contract	18
2.6.1 General Conditions of Contract.....	19
2.6.2 Special Conditions of Contract.....	28

2.7 Summary	29
CHAPTER THREE: MATERIALS AND METHODS	29
3.1 Introduction	29
3.2 What is Research?	29
3.3 Research Strategy	30
3.4 Description of the methodology	31
3.4.1 Literature Review	31
3.4.2 Interview Questionnaire development.....	32
3.4.3 Data Collection	32
3.4.4 Collecting.....	32
3.4.5 Data Analysis.....	32
3.4.6 Recommendations and Conclusion	32
CHAPTER FOUR: RESULT AND DISCUSSION	34
4.1 Differences and Similarities of Conditions of Contract	34
4.2 Results	46
4.3 Discussion	54
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS	58
5.1 Conclusions	58
5.2 Recommendations	59
REFERENCES	61
APPENDIX I	65
INTERVIEW QUESTION.....	65

ABBREVIATIONS

Art.....	Article
BaTCODA.....	Building and Transport Construction and Design Authority, 1987
BOT	Build-Operate-Transfer
DBB.....	Design Bid Build
ENAA.....	Engineering Advancement Association
EPC.....	Engineer Procure Construct
FIDIC.....	FEDERATION INTERNATIONALE DES INGENIEURS CONSEILS, 1999
GCC.....	General Conditions of Contract
ICE.....	Institute of Civil Engineering
MoWUD	Ministry of Works and Urban Development, standard Conditions of Contract for construction of civil works Projects. December 1994
PPA	Public Procurement Agency, August 2011
SCC.....	Special Conditions of Contract
UK	United Kingdom

CHAPTER ONE: INTRODUCTION

1.1 Background

The Construction industry involves the participation of significant numbers of people and sectors of the economy. There are varieties of factors that affect the relationships of the participants. These include the length of the project, its nature of outside organization, its size and the fact that the price agreed and the amount of work done may change as it proceeds and it is risk associated. Due to these factors the participants in the industry goes to their benefits (Johan, 2005).

The participants who are engaged to work on the project are mainly unaccustomed to working with each other and, hence project activity imposes a special demand on team building and motivation. In addition, every participant should be made aware of all the governing conditions, objectives, responsibilities, relationships and other basic parameters of construction projects (Johan, 2007).

It is this complex nature of the construction industry that has necessitated construction contract. A construction contract is best described as a complex web of competing interests. Thus, for a project to be executed successfully, the obligations and responsibilities as well as the privilege of the participants must be clearly defined in Contract documents. Contract documents establish effective lines of communication which facilitates free flow of information throughout the duration of the project (STUART, 1998).

Therefore, it needs a system of activity that brings a project to completion with all participants in harmony. That is, the project is completed within virtual compliance with the contract documents in which each participant is satisfied with the progress, the performance, the product and the profit derived. The system that brings all this together is the contract and it is administered by conditions of contract.

Since parties in the contract go to their interest the conditions of contract has to define the relationship, obligations, liability and enforcement of parties as well as the legal, financial and technical aspects of the project clearly without any ambiguity to share the risks. However, it is hard to expect them to address every eventuality that may occur throughout the life of a construction project. At best, the contract conditions serve as models from which individual project stakeholders can devise better-fitted contract documents.

Such Conditions of Contract are General and Particular (special) conditions prepared by professional associations (consultants), financiers, and institutions or as in the case of Ethiopia

by regulatory bodies. The most prevalent forms of such General Conditions of Contract are those prepared by Fe'd'eration Internationale des inge'nieur- Conseils (FIDIC), ICE conditions, Ministries (example, MoWUD, PPA), and the like.

The Standard Conditions use in Ethiopia are most recently FIDIC (for international contracts), recent Standard Condition issued by Public Procuring Agency (PPA, August 2011), and National Competitive Bidding by Ethiopian Roads Authority.

Our local conditions of contract are taken from FIDIC conditions of contract with certain critical local adaptation. These adaptations create differences among the conditions of contracts. Thus, identifying the differences of the conditions of contract, compare and the impact of those differences on practice is vital towards creating a harmonized environment among the contracting parties.

Hence, it is necessary for practitioners and academics to understand the features of FIDIC and appreciate their comparison with PPA. It becomes the academic researcher responsibility to proactively evaluate the pros and cons of both contracts to avoid any costly decisions and practices regarding the contract choice that could be made by practitioners. This paper will compare the main philosophies and some clauses of the two contracts. Also, it aims to evaluate whether PPA has made revolutionary improvements in contracting and construction practices in contrast to the traditional FIDIC form of contract. More specifically, it aims to examine the extent of improvement PPA has made in comparison to FIDIC in areas like duties and authorities of the engineer, Variations (Alteration, Addition and Omission), Procedure of Claim, Settlement of Dispute and change in cost and subsequent legislation.

1.2 Statement of the problem

Conditions of Contract are the legal document that defines the relationship between the parties. Hence, it is important to comparing its difference and provides solution to improve the problems that have been observed in practice. Based on this ground, this paper focuses on comparing between FIDIC and PPA conditions of contract. By answering the following key questions, I will try to achieve the objective of the paper.

The Key questions which shall be answered through this study are;

- What are the common and differences between FIDIC and PPA condition of contract for some clauses?

- What are the motives of adapting FIDIC conditions of contract critically for the selected clauses?

1.3 Objective of the study

The main objective of the study is to compare some clauses between FIDIC and PPA condition of contract standard forms in the Ethiopia construction industry in terms of minimizing contractual conflicts.

Thus, in line with the main objectives, the specific objectives are to:

- Critically comparing between FIDIC and PPA standard forms of contract for some selected clauses
- Surveying the views of Ethiopia construction practitioners via interviews in order to understand whether the choice of contract form affects the contract, and if so which one is more effective; FIDIC or PPA. Then, recommendations on the most suitable form can be made.
- review need for further critical adaptation; and
- review trends of development of contract conditions in Ethiopia

1.4 Significance of the study

This study focuses on some of the clauses in General Conditions of Contract that are considered as areas of influence on the relations of the parties. Thus, I believe that areas assessed in this study can initiate at least an intellectual debate among parties involved in the contract and also it is most important in our countries condition of contract because it causes conflict. This study also would have a relevance to the contractual stakeholders in the industry. This paper recommends to same extent the following points as a result of the study.

- Better relationship between contractual stakeholders;
- Better understanding of the document and interpretation;
- Develop project performance;
- Minimize conflicts that have been observed in practice;
- Minimize oppositional relationship; and
- Reduce ambiguity.

Finally, the result of this study will be implemented as some input for further studies on the topic.

1.5 Limitation of the study

Due to limitations of time and money, this paper were not able to conduct an in depth study in all clauses. This is to have a simple and clearly understandable interview questions, because as the number of the question increases, its results in extensive undesirable answers which will be difficult for analysis.

The result from the interviewer may not be true, because the respondents may answer the interview questions in the interest of themselves.

And also due to absence of building projects that are administered in FIDIC Conditions of Contract, I am forced not to be engaged in case studies that may have a considerable input to the study.

1.6 Paper layout

This paper has five chapters:

Chapter One:

This chapter is the introduction which presents the background, Statement of the problem, objective of the study and significance of the study.

Chapter Two:

The second chapter is a literature review on the law of contract construction law, basics of contract from the perspective of the Ethiopian civil code, construction contracts, contract documents & conditions of contract in general.

Chapter Three:

The third chapter describes the research Materials and methodology followed in writing this paper.

Chapter Four:

The fourth chapter is result and discussions of the collected data from the respondent and also it contains some of the differences and similarities of the General Conditions, namely FIDIC 1999 and PPA 2011.

Chapter Five:

The fifth chapter deals with conclusions of the results together with recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.1 The Law of Contract

Contract is the legal cornerstone of all business and commercial transactions and the legal tool which facilitates the exchange of goods or services. There is some debate about the nature and hence the definition of a contract. Some consider it a promise (Civil law philosophy) whereas others argue that it is an agreement (Common law philosophy) (Fenn, 2011).

A contract is defined as “an agreement between two or more parties that is binding in law□, „an agreement which the courts will enforce□ or „an agreement where the two parties to the agreement undertake certain obligations□. This agreement generates rights and obligations that may be enforced by a court. If either party breaks its promise, it will be in a breach of contract (Duxbury, 2009; Harris, 2007; Koffman and Macdonald, 1998). The agreement-based definition focuses on the entire package of responsibilities and rights that the parties agreed on to govern the relationship between them (Fenn, 2011).

On the other hand, a contract can be defined as “exchange of promises□, or “a promise or set of promises which the law will enforce□. For example, a supplier promises to provide a product or service at some time in the future and the customer promises to pay for that. The promise-based definition concentrates on the individual promises given by the parties and the reason that holds the parties to their promises, based the doctrine of consideration (Comish, 2012b; Fenn, 2011).

The modern and common practice in business, commercial, and legal activities is to consider a contract as an agreement rather than a promise (Fenn, 2011).

In practice, different terms can be used to refer to contract such as: purchase order, requisition, sub-contract, supply agreement. The party who instigates the contract may be called: customer, client, purchaser, employer, promoter, or vendor. The other party, who supplies, builds, constructs, fabricates, installs or provides the product may be called: supplier, contractor, seller, or sub-contractor. In construction contracts, there is often a third party employed by the client to secure his interests and act on his behalf. This party is named in the contract as project manager, architect, consultant, quantity surveyor, or construction manager (Comish, 2012b).

The essential elements that must be satisfied in a contract to be valid are: agreement, consideration (only required under Common law), legal intent, and capacity (Duxbury, 2009; Harris, 2007; Koffman, and Macdonald 1998). In a commercial context, legal intent and capacity rarely cause problems. If there is a dispute it will be about the agreement and possibly

consideration. The process to reach agreement consists of two parts; terms and conditions, and contract formation (the agreement itself). An agreement is normally made when one party offers (tender, bid, quotation) and the other party accepts the offer. Most model conditions include a Form of Agreement which when signed makes the contract. The party who offers usually does this in response to an invitation or invitation to treat (enquiry). There are rules about the offer and the acceptance. The offer must be made with the intention that it to be accepted and the acceptance must be certain, unambiguous, and unconditional (Uff, 2009; Murdoch and Hughes, 2000).

2.2 Construction Law

Construction law in construction works define the relationship of the parties involved with regard to their obligations, responsibilities and privileges in the work and are part of the existing law. The law is conventionally divided into topics according to their legal provenance, the law of contract, the law of property and so forth. The law relevant to construction works called construction law cuts across these divisions. Its main concern is the law of contracts, but it also covers issues such as, restitution, property etc (G.A.Hughes and J.N.Barber 1985).

In Ethiopian civil Code the law is divided into topics

- Book 1 (Person),
- Book 2 (Family and successions),
- Book 3 (Goods),
- Book 4 (Obligations) and
- Book 5 (Special contracts)

Construction contracts are governed by the law of contracts, Obligations (Book 4) which deals with: Contract in general, extra contractual liability ...etc. and Book 5 which deals with special contracts such as administrative contract.

A contract shall be deemed to be administrative where (Art.3132)

- a) It is expressly qualified as such by law or by parties or
- b) It is connected with activity of the public services and implies a permanent Participation of the party contracting with the administrative authorities in the execution of the such services or
- c) It contains one or more provisions which could only have been inspired by Urgent considerations of general interest extraneous to relations between private individuals.

The following are also an administrative contract:

- Contracts for works and labor relating to works to be done in connection with the building, repair or installation of immovable. (Art.3019-3040)
- Contracts for public works: “a contract whereby a person, the contractor binds himself in favor of an administrative authority to construct, maintain or repair a public work in consideration of price.” (Art.3244-3296)

This all implies that construction contract is an administrative contract.

It is obvious that a person has a duty to read and understand a contract before accepting it and his/her failure not to do so will not excuse his /her ignorance of the contents. With this in mind, the following sections discuss about the basics of contracts and their major characteristics from the perspective of Ethiopian law.

2.3 Basics of Contract

Definition of Contract;

A Contract is a written agreement between or among two or more parties whereby each party promises to do or not to do something and agrees to terms (conditions and Warranties) set out in the contract (Wubeshet, 2006).

A contract is an agreement where two or more persons as between themselves create, vary, or extinguish obligations of a proprietary nature. (Art.1675)

The purposes of a contract are to:

- Enforce law or bind conditions between or among the parties agree to procure services or works or goods.
- Clearly show the Terms and Conditions of contracts the parties agree with.
- Clearly show the Rights, Obligations and remedial rights of performances from the contracting parties.
- Clearly show handling provisions for price, completion time, requirement variations adjustment systems, Changes in cost and legislations and dispute resolution mechanisms (Wubeshet, 2006).
- Clearly show handling provisions for price, completion time, requirement variations adjustment systems, Changes in cost and legislations and dispute resolution mechanisms (Wubeshet, 2006).

2.3.1 Contents of the contract

There are basic contents of contract which contracting parties are expected to understand. They are:

- Formation of Contract;
- Terms of Contract;
- Variation of Contract;
- Privity of Contract;
- Discharge of Contract; and
- Invalidity of Contract.

Formation of Contract

There are essential requirements with respect to the nature and circumstances of the commitment that must be fulfilled for a contract to be formed.

The following are essential features:

- I. Offer and Acceptance;
- II. Consideration;
- III. Intention to be legally bound;
- IV. Capacity to contract ;
- V. The object of the Contract and ; and
- VI. Formalities.

I. Offer and acceptance (agreement)

a) Offer

An offer is an expression that one party is willing to be bound by specific terms which are set out in the contract. For example a bid by a contractor promising to construct a project constitutes an offer.

An offer remains open unless it is terminated. Termination can occur in the following ways:

- i. A refusal (Rejection) or counter offer but not just a request for further information;
- ii. Death of offeror or offeree;
- iii. None acceptance within the offer time or after reasonable length of time;
- iv. Failure of a condition subject to which the offer was made; and
- v. Revocation of the offer (withdrawal of offer).

b) Acceptance

A contract does not exist until the offer is accepted by the other party (for example when the owner notifies the winning contractor, his offer has been accepted a contract is formed).

This acceptance must be:

- absolute - i.e. accepting all the terms of the offer;
- There must be an indication of consent - i.e. silence does not indicate acceptance;
- The acceptance must be communicated to the offeror; and
- It must be the offeree or his agent which communicates the acceptance.

When the processes of offer and acceptance are accomplished, there is an agreement.

II. Considerations

Consideration is the price for the promise i.e. what one party to a contract can get from the other party in return for performing contract obligations.

Consideration must be:

- of some value, but not necessarily adequate;
- additional to the duty in the law;
- additional to previous contract agreements; and
- For a future act.

If one party makes a promise and the other party offers nothing in return for that promise, the promise is unenforceable due to lack of consideration (A.A.Kwaky, 1997 and Zewidu, 2016)

III. Intention to be legally bound

Intention to be legally bound means the legal competence of the parties to enter into legally binding contract. It is necessary that the parties can be deemed to have intended to create legal relationship. This intention makes the agreement they have reached to be one which would be legally enforceable (A.A.Kwaky, 1997).

IV. Capacity to Contract

Capacity refers to the legal status of parties to make a legally binding contract. Generally, all persons have full and qualified status to be bound and to bind others by agreement. The exceptions to this general rule may be summarized under the following: (Zewidu, 2016)

- minors (under the age of 18);
- those considered mentally incompetent;
- mentally ill; and
- Under the influence of alcohol and other drugs.

V. The object of the contract

The object of the contract must be possible. A contract shall be of no effect where the obligations of the parties or one of them relate to a thing or fact which is impossible and such impossibility is absolute and insuperable. (Art.1715)

VI. Formalities

The requirements of formalities depend on the nature of the contract. Some contract must be in writing or in a form acceptable by law. Such provisions for forms of contract are stipulated in the civil code of Ethiopia in Article 1719:

- Unless otherwise provided, no special form shall be required and a contract shall be valid where the parties agree.
- Where a special form is expressly prescribed by law such form shall be observed.
- The parties may stipulate that the contract shall be made in a special form.

Whenever these formalities require that the contract to be in the form of writing, the law also has provisions toward these:

Art.1727 pertains to contracts which are in writing form:

- Any contract required to be in writing shall be supported by a special document signed by all parties bound by the contract.
- It shall be of no effect unless it is attested by two witnesses.

Contracts requiring written evidence are: (civil code of Ethiopia)

- Contracts relating to immovable
- Contracts made with a public administration
- Contract of guarantee

- Insurance contracts

Terms of Contract

The terms of contract are provisions or stipulations in a valid contract describing some aspects of the agreements between the parties to contract. The terms define the rights and obligations of the parties in accordance with their agreement. The terms can either be express, implied or statutory (A.A.Kwaky, 1997).

- Implied terms: are contract terms which are not written down in a contract or openly expressed at the time the contract is made, but which the law implies.
- Express terms: are words expressly agreed by parties to contract and by which they intend to be bound.
- Statutory terms: are terms which are imparted into contracts by legislation. The Civil Code of Ethiopia, procurement law and other pertinent legislation are example of these.

Contract terms can be also be either:

- **Conditions:** are fundamental to the contract. Failure to adhere to a condition may result in a breach and/or damages.
- **Warranties**-are subsidiary to the main contract. A breach of warranty will only result in the injured party suing for damages.

Variation of Contract

Contracts are protected by Ethiopian law in that no court may vary a contract or alter its terms on the ground of equity except in such cases are expressly provided by law. Notwithstanding that the conditions of its performance have changed and the obligations assumed by party have become more difficult than foresaw.

Privitiy of Contract

Only parties who enter into a contractual agreement will have the right to sue or a liability to be sued due to a contract.

Discharge of Contract

There are four ways in which a contract may be discharged (A.A.Kwaky, 1997).

a) By performance: In order to be fully discharged from a contract, the parties must have completed all the obligations set in terms of contract.

A construction contract will be discharged by performance on the part of the contractor when all the works has been completed including maintenance during defects liability period, and when the Engineer has issued all the required certificates and on the part of the employer when he has paid all the payments due.

b) By agreement: A contractual obligation may be discharged by a subsequent binding contract.

This approach to the discharge of contract is possible where;

- **By mutual agreement (consent of the parties):** The parties may mutually agree to release each other from their contractual obligation and cancel the contract. This termination, according to Art.1819, should have no retrospective effect.
- **By novation:** According to Art. 1826, an obligation may be extinguished by the principle of novation when the parties agree to substitute therefore a new obligation which differs from the original one on account of its subject or matter.
- **By accord and satisfaction:** The parties may accept performance that is different from what was agreed on in the original contract.

c) by Frustration : Occurs when the contract was executable at time of agreement but subsequent events, over which the contracting parties have no control, make it impossible to fulfill the contract obligations. The Ethiopian civil code deals with frustration under force majeure.(Art.1792)

d) By Acceptance of breach: Breach of a contract occurs where, without justification, a party either fails to perform its contractual obligation expressly or by implication. when this happens the party not in breach always has an action for damages against the party in breach and, in certain circumstances, may treat the contract as repudiated by the party in breach and refuse further performance.

Invalidation of Contract

Invalidated contract is a contract which is not binding. The two main factors that can invalidate a contract are mistake and misrepresentation.

Mistake: the term ‘mistake’ is used to describe the situation in which an ‘offer’ made by one party and its ‘acceptance’ by the other do not actually corresponds (Johan, 2005).

Misrepresentation (False statement): Misrepresentation may be described as the making of an untrue statement relating to fact which includes another party to enter into contract.

When misrepresentation occurs, the injured party can either state or reject the contract. He or she can also bring an action for either rescission and restitution for damages.

2.4 Construction Contract

There are many definitions for the word Contract. One of the most common definitions is that "a contract is a document that spells out the rights and obligations of parties and the administration of this interaction while protecting the parties against the risks that emanate from various relationships, actions and production" (Verster, 2006).

Twort et.al (2004) added that the contract legally binds the Contractor to construct the works through signing an agreement between the two parties with respect to the obligations and liabilities.

In the construction industry, a variety of factors make the construction contract different from most other types of contracts, such as the complex nature of the project, the period and size of the project, the price agreed and the amount of works that may be changed while works proceed. The Ethiopian Civil Code 1960 also defines as "a contract of work and labor is a contract whereby one party, the contractor, undertakes to produce a given result, under his own responsibility, in consideration of a remuneration that the other party, the client, undertakes to pay him." (Art.2610)

According to PPA 2011 "Contract" means the binding Contract Agreement entered into between the Public Body and the Contractor, comprising Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein, the contract agreement, the letter of acceptance, the letter of tender, these conditions and according to FIDIC 1999 "contract" means the contract agreement, the letter of acceptance, the letter of tender, these conditions, the specification, the drawings, the schedules, and the further documents(if any) which are listed in the contract agreement or in the letter of acceptance.

The contract parties of any construction project are the Employer (who is also known as the Owner), the Engineer (who is also known as Consultant), and the Contractor. According to the FIDIC Red Book, the Employer is the procurer of the civil engineering works; he is generally initiates the project and pays for Contractor who builds the project according to what the contract says. FIDIC defines the Contractor as the person whose tender has been accepted by the Employer. The Engineer is the person appointed by the Employer to act as the Engineer for the purposes of the contract. However, Employer, Contractor and Engineer are forming a three-party

system and (Lina, 1997 and Niraula et. Al, 2011).

It is valuable to mention that FIDIC conditions describe the role of the contract's parties in details as will be illustrated next.

2.4.1 Construction Contracts Types

Before the start of any construction project, the Employer need to make many important decisions; one of them is to decide what kind of construction contract to become involved with the Contractor. This is also important because the Employer needs to decide the type of the "General Conditions" that must be used according to the type the construction contract.

The construction contracts are classified into two types; the first type is based on the "Contractual Arrangements", while the second is based on the "Terms of Payment" (Tang et al., 2003). A brief description for both types is discussed hereafter.

2.4.1.1 Contractual Arrangements

- **Traditional contracts:** In these contracts the Employer has a direct contractual relationship with the Engineer and the Contractor. It starts when the Employer appoints the Engineer to carry out all the designs and prepare the contract documents, in addition to the supervision at the project implementation. In this type of contracts, there is no contractual relationship between the Engineer and the Contractor. One of the main advantages is that it provides the best price for the Employer because it is open competition. On the other hand, this method takes longer time than other newer methods (Tang et al., 2003).
- **Design-Build, Turnkey, and Engineer-Procure-Construct (EPC) Contracts:** The idea here is to place the duty to design and construct on the Contractor as a package deal. The role of the Employer is essentially the contract administration. One of the important advantages in the method that there is saving in time by direct communication between the Employer and the Contractor. On the other hand, the Employer will not have independent advice on the construction and therefore a problem in cost and quality may occur (Huse, 2002).
- **Management Contracts:** These contracts were developed in the UK. In such contracts, the Employer appoints an external management Contractor to manage both design and construction phases of the projects. The management Contractor tenders out the work to sub- Contractors, usually named as package Contractors. A fee is received from the Employer to execute all work as packages in addition to the managing all works. One

disadvantage here is that the Employer must pay a certain percentage fee as management fee, in addition to the absence of the overall tender price for project at the starting of the work (Tang et al., 2003).

- **Construction Management Contracts:** These contracts were developed in the USA. These are basically similar to management contracts, however, the difference is that the construction manager (usually a firm) does not have any contractual relation with the package Contractor, but it has contractual relationship with the Employer, thus, the construction manager acts as a an agent to the Employer (Tang et al., 2003).
- **Build-Operate-Transfer (BOT) Contracts:** These Contracts have become popular recently especially in developing countries. Since governments in the developing countries mostly have budgetary constrains to initialize large development projects, BOT Contracts offer a unique opportunity for both financier and Employer. BOT contracting is an option for financing the infrastructure and boost the economical growth of the country without direct utilization of government finances. In the private sector, and when the land is available but no finance is available to make the sufficient development on these lands, BOT can be a valuable alternative (Khan et al., 2008).

2.4.1.2 Terms of Payment Contracts

- **Fixed price (lump sum) contracts:** In these contracts, the Contractor receives an exact lump sum amount of money to complete all facilities described in the construction contract. Thus, the Contractor quotes a single guaranteed price to compensate for all the labor, material, equipment and services to complete all works. Pfeffer described this contract as the most suitable for an Employer who has very tight budget constraints or lacks experience in the construction industry (Pfeffer, 2010). In addition, the Employer must have sufficiently detailed, complete drawings, specifications and construction document for effective lump sum contract. This is important for properly estimate the cost of labor and materials.
- **Unit price contracts:** Unit price is the basis in the agreement between the Employer and the Contractor, as the contract is structured on specified unit prices for the estimate quantities of the work. Thus, the contract will provide the Employer with specific price of particular items, and the Employer agrees to pay the Contractor only for actual units that the Contractor provides, installs, or constructs in the project. The main advantage to

the Employer in this contract is that he can proceed with the work with less risk. In the other hand, the main disadvantage to the Employer is when inaccuracies in the approximate quantities occur. This will result in work of greater costs than what was originally anticipated (Ramaswamy, 2010).

- **Cost-reimbursable (or cost-plus) contracts:** These contracts are suitable for the Employer who has experience in the construction industry, and when the scope of work cannot be defined easily by the Employer. The idea of the cost-plus is that the Employer pays to Contractor the cost of actual work without any mark-ups, but he pays a specified fee to cover overhead and profits, where both Employer and Contractor agrees before the project begins, which is usually based on a percentage of the cost of the work. One of the main advantages of the cost-plus contracts that it allows for the Employer to have more flexibility to change designs and materials as the project proceeds. The main disadvantages are that costs can rise quickly and therefore the risk is high in the type of contracts (Pfeffer, 2010).
- **Target Cost Contract:** This type is relatively similar to the cost- reimbursable contracts, but the difference is that both Employer and the Contractor agree to an expected target cost before the start of the project. Any difference in profit or loss between the final and the targeted cost is shared between the Employer and the Contractor (Tang et al., 2003).

2.5 Contract Documents According to Conditions

As stated above, the contract controls the relation between the Employer and the Contractor. As construction works are often complex, the Contractor is involved in many hundreds of different operations using many different materials and manufactured items, including employment of a wide variety of specialists. Thus, these documents which define the contract are complex and comprehensive. The task of preparing them for tendering therefore warrants a close attention to detail and uniformity approach (Twort et al., 2004). Another reason to use contract documents is related to unexpected problems which may occur at any stage of the construction period, which usually cause delays and additional costs, the contract documents declare what to do at any stage and the consequences (Totter dill, 2006).

Jaeger and Hok in their book "FIDIC-A Guide for Practitioners", listed the contract documents according to FIDIC "Red Book" where these document can be summarized in order of importance as below (Jaeger et al., 2009).

2.5.1 The Contract Agreement

With reference to sub-clause 1.6 in FIDIC "Red Book", it is the main document used to signify and formalize the construction contract between the Employer and Contractor. It must be carefully prepared because it is a legally binding document, and both parties agree on all the terms in the tender (Waddell, 2012).

2.5.2 The Letter of Acceptance

With reference to sub-clause 1.1.1.3 in the Red Book, the letter of formal acceptance signed by the Employer in which the Employer accepts the Contractor's offer to carry out the work (FIDIC, 1999). Other references use the definition "Notice of Award" to describe the written notice by the Employer to the successful bidder stating that the Employer will sign the agreement (Waddell, 2012).

2.5.3 The Letter of Tender

With reference to Sub-clause 1.1.1.4, in the FIDIC Red Book; it means the signed offer which was prepared by the Contractor and submitted to the Employer (Jaeger et al, 2009). It includes the sub clause 1.1.1.9 "Appendix to Tender ". It covers important elements such as expected time for completion, access to site, language, etc.

2.5.4 Particular Conditions

These usually contain amendments or additions that the Employer wishes to make to the General Conditions. Particular Conditions (may be called also as the Supplementary Conditions) change or replace and may delete some clauses of the General Conditions.

2.5.5 General Conditions

Based on FIDIC, the Conditions of Contract for Building and Engineering Works Designed by the Employer is called "The Red Book 1999". There are other organizations who had prepared recommended standard General Conditions, such as ENAA (Engineering Advancement Association of Japan), ICE (Institute of Civil Engineers, UK), and JCT (Joint Contracts Tribunal, UK), etc.

In general, these conditions define the obligations and rights on how to execute the project. On the other hand, the legal aspects of the Contract Documents are outlined in the General Conditions (Waddell, 2012).

2.5.6 The Specifications

With reference to sub-clause 1.1.1.5 in the FIDIC Red Book, it is a document which specifies

the work (Twort et al., 2004). It usually starts with the description of the work required. The specifications describe many things, like the quality of materials, the method of testing to be adopted, etc.

2.5.7 The Drawings

With reference to sub-clause 1.1.1.6 in the FIDIC Red Book; the drawings specify the work details like location, scope and complexity, and show the full extent of what is required to be constructed. Drawings have cross-references to the specification because they can't represent quality (Jaeger et al., 2009).

The drawings should provide as clear picture as possible of all the works to be built. The more accurate the drawings are, the more easily for the Contractor to price the tender, and consequently less variations and extra payments exist (Twort et al., 2004).

The Schedules and any other documents forming part of the Contract With reference to sub-clause 1.1.1.7 in the FIDIC Red Book, such document may include the bill of quantities, data, lists, and schedules of rates and/or prices (FIDIC, 1999). The bill of quantity can be described as the list of items covering the works to be constructed. The document typically includes a mix of material and labour needs and is most often used to help a Contractor to estimate the cost of a project in order to prepare an accurate bid for work.

The priority of the contract documents was demonstrated in sub clause 1.5 in the FIDIC "Red Book" in accordance to the following sequence (Nardin, 2008):

- The Contract Agreement,
- The Letter of Acceptance,
- The Letter of Tender,
- The Particular Conditions,
- The General Conditions,
- The Specification,
- The Drawings, and
- The Schedules and any other documents forming part of the Contract.

2.6 Conditions of Contract

Conditions of Contract are terms in which parties in the contract are governed or administered with. That is, it is an administrative law which is the legally binding part of the contract. These

promises and terms shall be enforceable by law and incorporates the rights, obligations and Remedial rights of each contracting parties (Wubeshet, 2006).

Conditions of contract are often conventionally described as being either “general” or “special”.

2.6.1 General Conditions of Contract

The general conditions, sometimes called the general provisions specify the manner and the procedures for implementing the provisions of the construction contract according to the accepted practices with in the construction industry. These conditions are intended to govern and regulate the requirements of the formal contract or agreement.

The purpose of the general Conditions is to establish the legal responsibilities, obligations, authority, and rights of all parties involved in the project.

Some of the advantages of standard Conditions are: (Johan, 2005 and Zewidu, 2016)

- The parties will be familiar with their terms as result of common (frequent) usage.
- Avoids drafting contract for each project.
- Time for the preparation of contract conditions is saved

Some of the disadvantages of standard conditions are:

- The forms are cumbersome, complex and often difficult to understand.
- Because the resulting contract is often a compromise, they are resistant to change, many changes take a long time to bring into effect.

The standard contracts in use in Ethiopia are mostly FIDIC (for International contracts), "Standard Bidding Document for procurement of Works", of (PPA, 2011).

2.6.1.1 An over view of FIDIC Conditions of Contract

Over the years FIDIC has produced a number of standard forms of contract between various parties. The “traditional” FIDIC forms for contracts between employers and their contractors which have comes so widely used throughout the international construction market, and which are so familiar to most of those working on construction projects where the various parties involved come from different countries. There are five types of forms of contract in the FIDIC family; these are the red, yellow, silver, green, and white Books.

From the five types of forms of contract in the FIDIC family I am trying to see the Red Book.

Red Book: There are five editions of the Red book the last being in 1999. The Red Book was intended for Civil Engineering construction works.

Yellow Book: The yellow Book first edition was published in 1963 for electrical and mechanical plant. It has more emphasis on testing, commissioning procedures, guarantees etc and is suitable for manufactured plant, such as turbines, generators. Payment under this book usually on a lump sum bases, according to milestone achieved.

Silver Book: The silver book is intended to be suitable for many projects, both larger and smaller:

- Where government employer or private developer wants his project on a fixed price turnkey bases and with strictly two-party approach (i.e. no Engineer).
- Build operate transfer type of projects employ the provisions of this book.

Green book: The green book is ideal for contracts of a smaller nature. There is no Engineer, so it is a direct contract between the employer and the contractor, but the employer may appoint an employer's representative.

White Book: The white book is used for Consultancy Services (Design and Supervision) in Design Bid Build (DBB) delivery system.



Figure (2.1): FIDIC Rainbow, the 1999 New Suite of FIDIC Source

2.6.1.2 An over view of Local Conditions of Contract (PPA)

The historical development of conditions of contract in Ethiopia, the first general conditions was published by Ministry of Urban Development and Housing in 1959. The second version that was drafted by the Building and Transport Construction and Design Authority (BaTCODA) came much later in 1987. BaTCODA has adapted from FIDIC 1987 (red book) with some adaptation to

the Ethiopian context. Ministry of Works and Urban Development (MoWUD) later in December 1994 released its standard conditions by making some modifications on the 1987 version of BaTCODA. The public Procurement Agency (PPA) issued the latest standard conditions of contract in August 2011.

Contents of General Conditions of Contract

The basic scope of coverage of Conditions of Contract is similar in both PPA and FIDIC General Conditions of Contract for construction works. Accordingly, here under are some of the common contents in Conditions of Contract to be discussed for the purpose of our desk study.

I. Definitions and Interpretations

For simplicity and save repetitions of cross-referencing, a number of definitions are first explained. Construction contracts are subject to broader principles of interpretation than most other contracts. Courts, in case of conflicts between parties to the contract, are frequently unfamiliar with the specialized rules that have evolved in the construction industry and often rely upon the indication of experts in the subject area to guide them in forming a decision. Definitions and interpretations in contract documents help them to clearly notify the responsibilities duties and authorities of the parties (Edward, 1987).

II. Contract Document

Contract documents are the basis on which a construction contract is carried out. The documents should explain in detail of all the requirements of the project in a clear and definite way. The documents also identify all the rights and responsibilities of the main actors of contract (Employer, Contractor and Engineer).

The contract document consists of various documents, letter of acceptance, the tender document, particular conditions of contract, general condition of contract, specifications, drawings, bill of quantities and other documents forming part of the contract, in ranking order of priority. The documents forming the contract are to be taken as mutually explanatory of one another. Establishing the order of precedence of the various documents contained will help to set a hierarchy of importance while reviewing contracts when contradictions arise between them (KKchITKARA, 1998).

III. General obligation of parties

- **Project participants:**

The project participants to construction Contract are the client (who is the initiator), the multi disciplinary construction consultants (who act as clients professional advisers), and the contractor (who constructs) (A.A.Kwakye, 1997).

- **Obligation of parties:**

In any construction contract the obligation, rights and remedial rights of each contractual party are precisely specified.

- **Obligation of the contractor:**

The following are some of the general obligation of the contractor under PPA-ICB Condition of Contract (Clause 34) and Under FIDIC (Clause 4.1).

- Perform and complete the work
- Provide all supervisions, labor, materials, plants, transport and temporary works.
- Afford reasonable facilities to other contractors on site
- Make good any work damage during the completion of any outstanding work.

- **Obligation of Engineer and Engineer's Representative**

This section clearly defines the duties, responsibilities, and power of the Engineer and the Engineer's representative. The Engineer and the Engineer's representative shall carry out the following duties and other specified in the contract. (PPA-ICB, Clause 12 and FIDIC, Clause 3)

- issue the certificate of practical completion of the works
- Responsible for the issue of instructions, drawings and other information.
- responsible for the design of works(other than permanent or temporary works designed by the contractor)

- **Obligation of the Employer:**

- (PPA-ICB, Clause 30-33)
 - Assistance and Supply of Documents
 - Access to the Site
 - Payment
 - Delayed Payments to the Contractor's Staff
- (FIDIC, Clause 2.1-2.5)

- Right of Access to the Site
- Permits, Licenses or Approvals
- Employer's Personnel
- Employer's Financial Arrangements
- Employer's Claims

IV. Construction Material and Workmanship

To make sure all the materials, plants and workmanship are done in accordance with the contract, tests and examinations are provided. It is the responsibility of the inspector to inspect promptly all material delivered to the site prior to their being used in the work and the ability of the workmanship (Edward, 1987).

V. Commencement, Time delays and Extension of Time

▪ Commencement

For timely completion of a project, the client should give site to the contractor for commencement of work according to the schedule. The time and date of commencement should be communicated to the concerned parties using the communication agreed up on in the contract.

▪ Time delay

Delays to the regular progress of the works may occur by one of the following conditions:

- By the Contractor: the Contractor is responsible for completing the works within the time available for completion and in accordance with the program approved by the Engineer. The Contractor must start the works as soon as possible and when proceed with due expedition and without delay to complete the works. The contractor must with due diligence proceed with the works or otherwise will be in breach of the obligations under the contract.
- delays which are the responsibilities of the Employer or the Engineer include:
 - late issue of drawings and specifications
 - late issue of instruction
 - adverse physical condition
 - Failure to give timely possession of the site and others.

- Beyond the control of any party involved: because of the way that construction works are carried out, there are occasions where delays are caused without either party to the contract being at fault. Provisions exist in construction contract to grant an extension of time to cover these situations (Edward, 1987).

▪ **Extension of Time**

The contractor must follow prescribed contract procedures and must prove entitlement to assure that contractually justified time extensions will be forth coming. The essential procedures are:

i. Importance of Notice of Claim

Most contracts contain a provision that the contractor claiming entitlement to a time extensions must file notice of claim within a stated number of calendar days after the event giving rise to the claim or give up the right to relief. Although sometimes the owner has constructive notice of the cause of the delay for which the Contractor is entitled to a time extension, the importance of the Contractor filling time extension claims within contractually prescribed time cannot be over emphasized.

ii. Contractual Responsibility to Prove Entitlement

In any type of claim situation, whether for time, additional contract payment, or both, the contractor-claimant bears the legal burden to prove entitlement under the terms of the contract to whatever is being claimed. For this reason, the contractor must support a time extension claim by showing that delaying events beyond his or her control have consumed part of the time allotted by the contract for performance of the contract work.

iii. Owners Responsibility and Contractor Time- Extension Request

Contractors bear the heavy contractual burden of performing the required contract work within the contract time period. They also are contractually entitled to the benefit of having the contract time extended due to the impact of an excusable or compensable delay within the reasonable time after the delay ends so that they can properly and efficiently plan the remaining contract work. Failure of the Owner to grant a properly supported request for an extension of contract time or failure to grant it in timely manner is a breach of the contract.

iv. Granting of Time Extensions

A time extension can be only be granted by a formal change to the contract executed by the owner. Regardless of the merits of the Contractor's claim, the contract date is not extended until and unless the owner has formally notified by a written change to the contract that the contract has been extended by a stated number of calendar days to the new date stated (Edward, 1987).

VI. Completion and Maintenance

▪ Completion:

Normally, project completion time is specified by the client, but when it is made an object of competition it is specified by the contractor. In the case, it is expected that the contractor will endeavor to complete the whole of the works within the agreed or specified time.

▪ Maintenance:

The project become officially completed when the Engineer issue the certificate of substantial completion of the works. The Contractor is responsible in making good any of his defects from this date for the time period stated in the defects liability period (STUART, 1998).

VII. Alterations, Additions and Omissions

When the Contractor makes a claim for payment for extra work carried out, the primary question to be asked is whether the work is included in the contract or amounts to a variation. Variation is treated under the clause Alterations Additions, Omissions. And it includes changes in the quality, form, character, kind position, dimension level or line and changes in any specified sequence method or timing of construction required by the contract and may be ordered during the defects correction period (Dennis et al., 1989).

VIII. Ownership of Plant and Materials

All equipment, temporary works, plant and materials provided by the Contractor shall, when brought on the Site, be deemed to be exclusively intended for the execution of the works and the Contractor shall not remove the same or any part thereof, except for the purpose of moving it from one part of the site to another, without the consent of the Engineer. Such consent shall, however, not be required for vehicles engaged in transporting any staff, labor, equipment, temporary works, plant or materials to or from the Site. (Clause 83.1 PPA-ICB)

IX. Measurement and Payment

- **Standard Contract Provisions for Measurement and Payment**

Although each set of contract documents treats this subject slightly differently, the provisions of the project document must be the final determining factor in establishing the method and procedure for handling contractor payment request.

- **Liquidated damage during construction**

The assessment of liquidated damages against a contractor for monetary losses suffered by the owner as a result of contractor's failure to meet the contractual completion date that have been completed for the excess construction time beyond the final specified completion date.

- **Certificate and Payment**

It is customary that the contracts of more than limited duration require the owner or construction tendered to make periodic payment or cost reimbursements to the constructors during construction period.

Depending on contract terms, the request may be submitted to consultants or directly to the owner and when it is his representative the consultant will check the payment request and issue a certificate of payment and send to on the owner or lending institution (Edward, 1987).

X. The Contractor and Sub Contractor

Almost all of the construction contract general conditions are based upon having the Resident project representative deal solely with the contractor, not directly with the sub contractor, material supplier or fabricators. The general conditions usually states that the contractor is fully responsible for all the acts and omissions of the subcontractors and nothing in general condition is intended to create any contractual relationship between any sub contractors and the owner or design firm or any obligation to assure that the contractor has paid the sub contractor or material suppliers (KKchITKARA, 1998).

XI. Procedure for Claims

Construction projects may not go smoothly as planned due to uncertainties about events in the future. Claims may occur due to unforeseen site condition, increases in scope of work and others. As a result disagreement can arise regarding contractual matters. Contractors may require additional costs or time extensions which lead to potential claims.

The contract usually prescribes the procedure for processing the claim once the contractor has properly submitted it. In some contracts, these procedures are relatively straight forward, resulting in reasonably prompt consideration of the claim by the Engineer. Owner usually awaits the recommendation of the Engineer before communicating their position or the claim back to the contractor, accepting it, denying it, or accepting in part or denying in part. The contractor then must either accept the owner's decision or dispute it, and invoke the dispute resolution procedure of the contract, usually within a stated number of days after receiving the decision (Edward, 1987).

XII. Notice

Notice to proceed is the formal communication under construction contract. It forms the bases of a legal contract between the owner and contractor. Because negotiation of the provision of the contract usually takes a certain amount of time, this notice allows the work to begin before the actual contract is signed. Most General Conditions of contracts specify the forms of communication weather it could be in writing, oral or both (IAN M, 2003).

XIII. Settlement of Disputes

Disputes generally arise after the failure of one or more project participants to fulfill their contractual obligations. No construction projects is free from problems and when problems are not immediately solved as they arise, they can become major issues which eventually end up in court or before arbitration for resolution.

The express terms of contract should provide solutions to any contractual disputes that arise between the parties by reference to the contact terms appropriate to the circumstances. But since some difficulties may arise in the definition of the express terms and their relation to the legalities of events or events causing the disputes; it is likely to result in the need for the third party (court, arbitration, or mediator) to assist in the resolution of disputes.

In the event that the resident consultant cannot resolve the differences in the field, the problem should be discussed with the consultants or the owner. If the difference still cannot be resolved within the terms of the contact, the constructor should be reminded of the provisions of the contract documents relating to the time and methods of file claims, and such reminder should be recorded in the resident consultants dairy (Alan et al., 2004).

XIV. Changes in Cost and Subsequent Legislation

Ups and downs in materials, labor and equipment price are likely to occur in the project lifetime. These then have to be properly addressed to protect stakeholders from accruing costs that may lead to bankruptcy.

The currency and rate of exchange to be used in the business transaction aspect of the construction work need to be specified in the contract. The parties to the contract need to be guided by the actual or expected currencies of cost as compared to proportions of currencies in which the original contract price was payable. When this is not provided for, series distortions may occur (Allan, 1998)

From the above discussed contents of conditions of contract our focus falls on:

- Engineer and Engineer's Representative
- Alteration, Additions and Omissions
- Procedure of Claims
- Settlement of Disputes and
- Change in Cost and Legislations

2.6.2 Special Conditions of Contract

These are sometimes called supplementary conditions or special provisions of the Contract. They are intended to supplement the general conditions and are project-specific. Special conditions include additional owner requirements such as provisions for prevailing wages and additional insurance requirements.

Special Conditions of Contract describes Conditions particularly relevant to the country where the works are being carried out, and the required amendments on the General Conditions of Contract. It describes the liabilities, responsibilities, and power of the employer, contractor, and Engineer. Providing such documents assists the contractors to focus on the Conditions of particular applications that are relevant to the particular work, and hence minimize risks and misunderstandings (Johan, 2005).

Special conditions must of course be set out in the schedule in full. Care should be taken to see that they are consistent with the general conditions that the words are given the same meaning and the same words are used to describe the same item or activity. It is a rule of construction that if a drafts man has used two different words he will be assumed to have done so deliberately, and that therefore they have different meanings (Dennis et al., 1989)

The Conditions of particular applications may contain issues such as,

- any modifications to the general conditions
- applicable language and law
- precedence of documents
- performance security
- customs issues etc

2.7 Summary

From this chapter we see what is the law of contract, construction law, basics of contract, contents of the contract construction contract and its type, contract documents according to conditions, condition of contract types. An over view of FIDIC conditions of contract, an over view of local conditions of contract (PPA) and its basic contents (causes) which are similar and different that will bring to conflict or dispute/claim.

CHAPTER THREE: MATERIALS AND METHODS

3.1 Introduction

"Learning to learn is to know how to navigate in a forest of facts, ideas and theories, a proliferation of constantly changing items of knowledge...is to know what to ignore but at the same time not rejecting innovation and research." (Rowe et al., 2007).

Innovation and research create together a closed loop, indeed. While innovation transfers the knowledge into money, research transfers the money into knowledge. The aim of doing a research is not only to know facts and understand interrelationships for the sake of knowledge, but in order to act and act in a better way (Bell, 2010).

This chapter defines research, research methodology and methods, outlines the most common research methodologies, and justifies the method selected for the acquisition and analysis of data.

3.2 What is Research?

Research can be defined as a systematic, methodical, and critical investigation, inquiry, search, or study of certain aspects of a topic with clear aims and objectives to discover new or collate old facts (Naoum, 2007). Generally, the aim will be to expand current knowledge, answer specific questions, solve a particular problem or test a hypothesis. However, a research does not necessarily need to contribute to knowledge; it may be simply a learning process (Naoum, 2007).

Research is classified according to four dimensions into: industrial/academic, conceptual/empirical, qualitative/quantitative, and pure/applied. This research is academic, conceptual, qualitative, and a combination of pure and applied research. The pure research is theoretical and aims to develop the knowledge. Applied research seeks to solve practical problem in the industry, besides developing the knowledge (Fellows et al., 2008).

In the literature, the term methodology is loosely used, and various authors use it to refer to different things (Carter et al., 2007). Research methodology refers to the principles and procedures of the logical thought process that shows how the research should proceed. Research methods are all about the available techniques for sampling, gathering data and evidence, data management, data analysis, and reporting. Indeed, they are the nuts and bolts and the pathway to the final product of the research project. In short, a methodology provides description, explanation, evaluation, and justification for the methods which produce the knowledge in a research project (Carter et al., 2007).

The choice of a research method and a data collection method is very important, since the process of how something is done directly affects the quality of the output.

3.3 Research Strategy

Research strategy can be defined as the way in which the research objectives can be questioned (Naoum, 2007). Research strategies fall into two categories; quantitative research and qualitative research. The selection between those two strategies depends on the purpose of the study and the type and availability of the required information (Naoum, 2007).

Quantitative research is objective in nature. It tests a hypothesis or a theory composed of variables. It measures and quantifies the research problem, and analyses the data using statistical procedures and methods. In other words, it attempts to establish relationships between the facts under investigation.

Qualitative research, on the other hand, is subjective in nature. It assesses people's experiences, descriptions, opinions, views, perceptions or attitudes towards certain variables constituting the research question or problem (Naoum, 2007).

The difference can be summarized by the fact that qualitative methodology aims to find out what things exist, but quantitative aims to determine how many such things there are (Crouch et al., 2006).

Table 3.1 provides a useful list of the most important differences between the two research strategies.

Features	Qualitative	Quantitative
Role	Fact finding based on opinions, views and measurement of perceptions	Fact-finding based on evidence or records
Researcher-subject relationship	Close	Distant
Scope of findings	Ideographic e.g. symbolizing ideas	Nomothetic e.g. stating laws
Theory/concepts- research relationship	Emergent/ developing	Testing/ confirmation
Nature of data	Rich and deep	Hard and reliable

Table 3.1: Some differences between quantitative and qualitative research (adapted from Naoum, 2007)

This paper is of qualitative nature; uses qualitative methods to acquire theoretical and qualitative data based on descriptive and commentary papers and articles because of the nature of the title to be studied. Descriptive texts describe the structure, features and principles of contracts while commentary texts critically analyze and evaluate effectiveness and performance of those contracts.

Qualitative strategy has been chosen because this paper is mainly inductive, their perception of the role of the contract in controlling this and their experience in using FIDIC. This will go hand in hand with the literature review comparing FIDIC and PPA. This strategy is the best way to link between the aim and conclusion as regards which standard form may suitable for Ethiopian construction industry and to adopt another condition.

3.4 Description of the methodology

3.4.1 Literature Review

The first task was collection of books, researches and literatures on related topics, and development of the literature review.

3.4.2 Interview Questionnaire development

A desk study of FIDIC 1999 and PPA 2011 conditions of contract have been conducted to identify the major difference of those conditions of contracts (clauses) for the purpose of structuring my paper interview questionnaire.

3.4.3 Data Collection

The Interview Questionnaire was distributed and discussion were made with Professionals ,consultants, contractors, concerned government bodies and lawyers based on relevant experiences in contract administration and other related positions. During interviewing, explanation was made to avoid unwanted answering and to control extensive answering which will result in confusion during analysis.

3.4.4 Collecting

At this stage, the collected data was arranged systematically as required and made ready for analysis.

3.4.5 Data Analysis

To conduct the analysis descriptive method of analysis was employed using inductive reasoning and concentrates on what most of my respondent idea fall. Thus, the qualitative data was analyzed using the frequency method in my discussion and percentile representation is described.

3.4.6 Recommendations and Conclusion

Conclusion is made from the analysis through gathered interview questions and Recommendation is made based on my findings and conclusions.

3.5 Basis of Research Questions

The research questions are prepared under five major clauses which has different questions under each clause.

Engineer and Engineer's Representative

In this part, the interview questions are structured to address questions related to powers, rights and authorities afforded to the Engineer with respect to Employer and contractor.

The first question under this focus on the flexibility, the clarity of the provisions, the assurance of the authority and the capacity of controlling the project cost and time used for assessing in the conditions of contact.

The second question works the respondents towards identifying the validation of the instruction that are not in writing. And the last question under this is the application of the provisional rates during disagreement.

Alteration, Addition and Omission

Under this clause, there is only one question which explores for variations necessitated due to default of the contractor.

Procedure for Claim

Under this, the question determines the clarity and the time limit for the procedure of the claim

Settlement of Disputes

Here, it assesses the impact of the free arbitration rule and being arbitrated by government body.

Change in Cost and Subsequent Legislation

This part assesses the way the party's negotiation during the increase or decrease of cost and where to specify and how to determine the increases or decrease of cost during performance.

In general, the interview questions prepared to answer the objectives of the paper and all the five major clauses which have three similar questions under each clause that try to assess the intension to adopt each clause, the provision of PPA Conditions of Contact to solve the weakness and the problems of the previous provisions in line with each clause, to answer the trend of the development of the Conditions of Contact in Ethiopia. The final question gear the respondents towards recommending for further adaptation of the respective clause and the way the provision have to appear to alleviate the problems and the weakness.

CHAPTER FOUR: RESULT AND DISCUSSION

This chapter provides the last necessary component in this paper in order to be able to draw sound conclusions as regards the aim and objective of this study.

It has three parts, the first part describes some of the differences and similarities of the Conditions of Contracts between FIDIC and PPA which I consider them as a difference and similarity that help to see which clauses are adopted and also help to assess the trend of development of the Conditions of Contract in my context. The second part deals with the result of collected data by focusing on the considered selected clauses and the third part is discussion which comes from second part of this chapter.

4.1 Differences and Similarities of Conditions of Contract

Table 4.1 showing the difference and similarity of conditions of contracts

GCC	Description	Clause No.
	I. Engineer and Engineer's Representative.	
	Engineer's Duties and Authority	
FIDIC	<p>The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.</p> <p>The Engineer shall have no authority to amend the Contract.</p> <p>The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. If the Engineer is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the Particular Conditions.</p> <p>The Employer undertakes not to impose further constraints on the Engineer's authority, except as agreed with the Contractor.</p> <p>However, whenever the Engineer exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.</p> <p>Except as otherwise stated in these Conditions:</p> <p style="text-align: center;">(a) whenever carrying out duties or exercising authority,</p>	3.1

	<p>specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer:</p> <p>to relieve either Party of any duties, obligations or responsibilities under the Contract: and any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.</p>	
PPA	<p>Except where otherwise specifically stated and subject to any restriction in the SCC, any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Public Body or the Contractor may be taken or executed by the Engineers named in the SCC. Except as expressly stated in the SCC, the Engineer shall not have authority to relieve the Contractor of any of his obligations under the Contract.</p> <p>Any notice, information or communication given to or made by an Engineer shall be deemed to have been given or made by the Public Body.</p>	<p>12.1</p> <p>12.2</p>
	Delegation by the Engineer	
FIDIC	<p>The Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties. However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations],</p>	3.2
PPA	<p>The Engineer may delegate any of his duties and responsibilities to Engineer's representative after notifying the Contractor, and may cancel any delegation after notifying the Contractor.</p>	12.3
	Instructions of the Engineer	

FIDIC	<p>The Engineer may issue to the Contractor (at any time) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation. Clause 13 [Variations and Adjustments] shall apply.</p> <p>The Contractor shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant:</p> <ul style="list-style-type: none"> (a) gives an oral instruction, (b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and (c) Does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation. <p>Then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).</p>	3.3
PPA	<p>Instructions and/or orders issued by the Engineer shall be by way of administrative orders. Such orders shall be dated, numbered and entered by the Engineer in a register, and copies thereof delivered by hand, where appropriate, to the Contractor's representative.</p> <p>Any communication given by the Engineer's representative to the Contractor in accordance with the terms of such delegation shall have the same effect as though it had been given by the Engineer, provided that:</p> <ul style="list-style-type: none"> (a) Any failure on the part of the Engineer's representative to disapprove any work, materials or plant shall not prejudice the authority of the Engineer to disapprove such work, materials or plant and to give the instructions necessary for the rectification 	<p>12.6</p> <p>12.5</p> <p>15.1</p>

	<p>thereof;</p> <p>(b) The Engineer shall be at liberty to reverse or vary the contents of such communication.</p> <p>The Engineer shall have power to order any modification to any part of the works necessary for the proper completion and /or functioning of the works. Such modifications may include additions, omissions, and substitutions, changes in quality, quantity, form, character, kind, position, dimension, level or line and changes in the specified sequence, method or timing of execution of the works. No order for a modification shall have the effect of invalidating the contract, but the financial effect, if any, of all such modifications shall be valued in accordance with GCC Clauses 15.5 and 15.7.</p>	
	Power of Engineer to fix rate	
FIDIC	The Engineer shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. It is clearly stated in the condition of contract.	12.3
PPA	<p>The prices for all modifications ordered by the Engineer in accordance with GCC Clause 15.2 and 15.4 shall be ascertained by the Engineer in accordance with the following principles:</p> <p>(a) Where work is of similar character and executed under similar conditions to work priced in the bill of quantities or price schedule it shall be valued at such rates and prices contained therein;</p> <p>(b) Where work is not of a similar character or is not executed under similar conditions, the rates and prices in the contract to be agreed through negotiation between the Engineer and the Contractor shall conform to the prevailing market price;</p> <p>(c) if the nature or amount of any modification relative to the nature or amount of the whole of the contract or to any part thereof shall be such that in the opinion of the Engineer any rate or price contained in the contract for any item of work is by reason of such modification rendered unreasonable, then the Engineer shall fix such rate or price as in the circumstances he shall think reasonable</p>	15.5

	and proper; (d) Where a modification is necessitated by default or breach of contract by the Contractor, any additional cost attributable to such modification shall be borne by the Contractor.	
	II. Contract document	
	Law and Language	
FIDIC	<p>The Contract shall be governed by the law of the country (or other jurisdiction) stated in the Appendix to Tender.</p> <p>If there are versions of any part of the Contract which are written in more than one language, the version which is in the ruling language stated in the Appendix to Tender shall prevail.</p> <p>The language for communications shall be that stated in the Appendix to Tender. If no language is stated there, the language for communications shall be the language in which the Contract (or most of it) is written.</p>	1.4
PPA	<p>The Contract, its meaning and interpretation, and relation between the Parties shall be governed by and interpreted in accordance with the laws of the Federal Democratic Republic of Ethiopia, unless otherwise stated in SCC.</p> <p>The Contract as well as all written and oral communication and documents relating to the Contract exchanged by the Contractor and the Public Body, shall be in English. Supporting documents and printed literature that are part of the Contract may be in another language, but any documents provided in another language must be accompanied by an accurate translation into English. For purposes of interpretation of the Contract, this translation shall govern.</p> <p>The Contractor shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.</p>	8.1 9.1 9.2
	Priority of Contract Documents	
FIDIC	The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:	

	<p>(a) The Contract Agreement (if any).</p> <p>(b) The Letter of Acceptance.</p> <p>(c) The Letter of Tender,</p> <p>(d) The Particular Conditions.</p> <p>(e) These General Conditions.</p> <p>(f) The Specification.</p> <p>(g) The Drawings, and</p> <p>(h) The Schedules and any other documents forming part of the Contract.</p> <p>If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.</p>	1.5
PPA	It is stated clearly in the condition of contract.	7.1-7.4
	III. General obligations	
	Period of Validity of Performance Security	
FIDIC	The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.	4.2
PPA	The Performance Security shall be discharged by the Public Body and returned to the Contractor not later than twenty-eight (28) days following the date of issuing of the signed Final Statement of Account referred to in GCC Clause 65, for its total amount except for amounts which are the subject of amicable settlement of disputes, unless specified otherwise in the SCC.	58.8
	IV. Materials, Plant and Workmanship	
	Dates for Inspection And Testing	
FIDIC	It is clearly stated on the condition of the contract.	7.3& 7.4
PPA	The Engineer shall be entitled, either by himself or his agent, to inspect, examine, measure and test the components, materials and workmanship, and	

	check the progress of preparation, fabrication or manufacture of anything being prepared, fabricated or manufactured for delivery under the contract in order to establish whether the components, materials and workmanship are of the requisite quality and quantity. This shall take place at the place of manufacture, fabrication, preparation or on the site or at such other places as may be specified in the contract.	81.2
	V. Alterations, Additions and Omissions	
	Variations	
FIDIC	It is clearly stated in the condition of contract.	13.1
PPA	The Engineer shall have power to order any modification to any part of the works necessary for the proper completion and /or functioning of the works. Such modifications may include additions, omissions, substitutions, changes in quality, quantity, form, character, kind, position, dimension, level or line and changes in the specified sequence, method or timing of execution of the works. No order for a modification shall have the effect of invalidating the contract, but the financial effect, if any, of all such modifications shall be valued in accordance with GCC Clauses 15.5 and 15.7.	15.1
	Variations Exceeding fixed per cent	
FIDIC	It is clearly stated in the condition of contract.	12.3 and 3.1
PPA	Where on provisional acceptance an increase or reduction in the total value of the works resulting from a change order, or from some other circumstance which is not caused by the Contractor's default, exceeds 25% of the initial contract price (or as modified by addendum), the Engineer shall, after consultation with the Public Body and the Contractor determine any reduction from the contract price as a consequence of the application of GCC Clause 15.5. The sum so determined shall be based on the amount by which the increase or decrease in value of the works exceeds 25%. The sum shall be notified by the Engineer to the Public Body and the Contractor and the contract price adjusted accordingly.	15.7

	<p>[Employer's Financial Arrangements],</p> <ul style="list-style-type: none"> (b) The Engineer fails, within 56 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate. (c) The Contractor does not receive the amount due under an Interim Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Employer's Claims]), (d) The Employer substantially fails to perform his obligations under the Contract. (e) The Employer fails to comply with Sub-Clause 1.6 [Contract Agreement] or Sub- Clause 1.7 [Assignment], (f) A prolonged suspension affects the whole of the Works as described in Sub- Clause 8.11 [Prolonged Suspension], or (g) The Employer becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him. compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events. <p>In any of these events or circumstances, the Contractor may Upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of subparagraph (f) or (g), the Contractor may by notice terminate the Contract immediately.</p>	
PPA	<p>The Contractor may, by not less than thirty (30) days' written notice to the Public Body, of such notice to be given after the occurrence of any of the events specified in GCC Sub-Clause 21.3 (a) to (d) terminate the Contract if:</p> <ul style="list-style-type: none"> a) The Public Body fails to pay any money due to the Contractor pursuant to the Contract and not subject to dispute pursuant to Clause 25, within forty-five (45) days after receiving written notice from the Contractor that such payment is overdue; b) The Public Body is in material breach of its obligations pursuant 	21.3

	<p>to the Contract and has not remedied the same within forty-five (45) days (or such longer period as the Contractor may have subsequently approved in writing) following the receipt by the Public Body of the Contractor's notice specifying such breach;</p> <p>c) The Public Body suspends the progress of the works or any part thereof for more than 180 days, for reasons not specified in the Contract, or not due to the Contractor's default.</p> <p>d) The Contractor is unable as the result of Force Majeure, to perform a material portion of the Works for a period of not less than sixty (60) days; or</p> <p>e) The Public Body fails to comply with any final decision reached as a result of settlement of disputes pursuant to GCC Clause 26 hereof.</p>	
	X. Changes in Cost and Legislation	
	Increase or Decrease of Cost	
FIDIC	States that it shall be added to or deducted from the contract price such sums in respect of rise or fall in the cost labor and/or materials or any other matters affecting the cost of the execution of the works as may be determined in accordance with part II of these conditions	13.8
PPA	<p>The Public Body can increase or decrease the Contract Price amount as described by this Clause.</p> <p>An adjustment of the Contract Price, depending of selected categories of contract price, shall be limited to an amount which takes account of price indexes or price indicators issued by Ethiopian Central Statistical Agency or Public Procurement and Property Administration Agency.</p>	<p>62.4</p> <p>62.8</p>
	XI. Value Engineering;	
FIDIC	<p>VE is a new concept introduced in such conditions of contract;</p> <ul style="list-style-type: none"> ✓ It is based on the principle of benefit sharing flowing from the approval & execution of the proposal made by the contractor. ✓ The benefit is to be share between the contractor & the employer; ✓ The contractor is also required to submit professional indemnity 	13.2

	insurance for its part of design submitted with its new proposal under such VE process;	
PPA	It has no explicit provision.	
	XII. Pre Mobilization Obligation (Performance Security)	
FIDIC	<p>The Contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form annexed to the Particular Conditions or in another form approved by the Employer.</p> <p>The Contractor shall ensure that the Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied any defects. If the terms of the Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the Works have been completed and any defects have been remedied.</p>	4.2
PPA	<p>The Contractor shall, within fifteen (15) days from signing the contract, provide a Performance Security for the due performance of the Contract in the amount specified in the SCC.</p> <p>Notwithstanding the provision of Sub-clause above a conditional insurance bond shall be accepted as Performance Security.</p> <p>The proceeds of the Performance Security shall be payable to the Public Body as compensation for any loss resulting from the Contractor's failure to complete its obligations under the Contract.</p>	58.1 58.2 58.3
	XII. Payment	
FIDIC	<p>The Employer shall pay to the Contractor:</p> <p>(a) The first installment of the advance payment within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the documents in accordance with Sub-Clause 4.2 [Performance Security} and Sub-Clause 14.2 [Advance Payment}, whichever is</p>	14.7

	<p>later:</p> <p>(b) The amount certified in each Interim Payment Certificate within 56 days after the Engineer receives the Statement and supporting documents: and</p> <p>(c) The amount certified in the Final Payment Certificate within 56 days after the Employer receives this Payment Certificate.</p> <p>Payment of the amount due in each currency shall be made into the bank account, nominated by the Contractor, in the payment country (for this currency) specified in the Contract.</p>	
PPA	<p>Payments to the Contractor of the amounts due under each of the interim payment certificates and the final statement of account issued by the Engineer shall be made by the Public Body within 90 days of such certificate of statement being delivered to the Public Body. The date of payment shall be the date on which the paying institution's account is debited. The payment certificate shall not be admissible if one or more essential requirements are not met.</p>	59.3

4.2 Results

The results of the responses of the Interview questionnaire are analyzed and summarized in the following table.

Table 4.2: Shows the organized, distributed, and returned interview questionnaire.

Respondents	Distributed interview questionnaire	Returned interview questionnaire(in No)	Returned Interview questionnaire (in %)
Contractor	16	15	93.75
Consultant	11	10	90.91
Government body	3	2	66.67
Lawyer	6	5	83.33
Professional	9	8	88.89
Total	45	40	88.89
Remark: 45 copies of the interview questionnaire were prepared and of which 40 were distributed while the others were rejected by most of the respondents.			

Table 4.3: Table showing results of the responses for the interview questionnaire

I.	The Engineer		Cont.	Cons.	Gov. Body	Lawyer	Prof.	Aver.
A. Duties and Authority of the Engineer								
1	Choice for this provision	FIDIC	60%	80%	0%	80%	88%	62%
		PPA	40%	20%	100%	20%	13%	39%
	a) Benefit of the mostly chosen							
	Provides Flexibility		87%	90%	100%	100%	88%	93%
	Provides Clarity		67%	90%	100%	80%	75%	82%
	Ensure Employers Authority		73%	80%	100%	80%	88%	84%
	Ensure Engineers Authority		93%	70%	100%	80%	88%	86%
	Appropriate Decision Making Process		87%	60%	100%	100%	88%	87%
	Control project cost and time		93%	90%	100%	100%	100%	97%
	b) The other option							

	Slow decision making process		40%	40%	0%	0%	50%	26%
	Undermining Employers Authority		27%	30%	0%	20%	13%	18%
	Undermining Engineer's Authority		33%	30%	50%	20%	50%	37%
	Embody ambiguity		27%	40%	50%	20%	25%	32%
	Risky to the Contractor		33%	40%	0%	20%	38%	26%
	Risky to the Employer		20%	30%	50%	40%	50%	38%
	Dependence on Employer Consent		67%	70%	50%	60%	75%	64%
2	What do you think about the intension to adopt this clause?							
	The common answer to this question was: It is necessary to give authority to the Engineer but to some extent there should be some controlling mechanism.							
3	Do you recommend further adaption of this clause?							
		Yes	60%	80%	0%	80%	88%	62%
		No	40%	20%	100%	20%	13%	39%
B) Instruction in writing								
1	Choice for this provision	FIDIC	100%	100%	100%	100%	100%	100%
		PPA	100%	100%	100%	100%	100%	100%
	a) Benefit of the mostly chosen							
	Ensure Legitimacy		100%	100%	100%	80%	100%	96%
	Clarity with respect to procedural requirement		100%	100%	100%	80%	100%	96%
	Proper recording and referencing of instructions		100%	100%	100%	100%	100%	100%

	b) The other option						
	Too formality - difficulty for urgent condition		0%	0%	0%	0%	0%
	Time taking process		0%	0%	0%	0%	0%
2	What do you think about the intension to adopt this clause?						
	The common answer to this question was: It is necessary to make any further decision for example for any claim arises and dispute also.						
3	Do you recommend further adaption of this clause?						
		Yes	0%	0%	0%	20%	4%
		No	100%	100%	100%	80%	96%
C) Power of the Engineer to fix rate							
1	Choice for this provision	FIDIC	100%	100%	100%	100%	100%
		PPA	100%	100%	100%	100%	100%
	a) Benefit of the mostly chosen						
	Protect the Employer		100%	100%	100%	60%	92%
	Facilitate timely payment		100%	100%	100%	80%	96%
	Good for both the employer and contractor		100%	100%	100%	100%	100%
	b) The other option						
	Maximize disagreement		0%	0%	0%	40%	8%
2	What do you think about the intension to adopt this clause?						

	The common answer to this question was: the intension to adopt this clause is good to some extent but there should be a clear procedure and limitation of percentage to fix the unit price.							
3	Do you recommend further adaption of this clause?							
		Yes	0%	0%	0%	40%	0%	8%
		No	100%	100%	100%	60%	100%	92%
II.	Alteration , Addition and Omission(Variations)							
1	Choice for this provision	FIDIC	87%	80%	50%	80%	100%	74%
		PPA	13%	20%	50%	20%	0%	21%
	a) Benefit of the mostly chosen							
	To manage uncertainty		100%	100%	100%	60%	100%	92%
	b) The other option							
	Open to cost overrun		0%	0%	0%	40%	0%	8%
2	What do you think about the intension to adopt this clause?							
	The common answer to this question was: It is recommended to adopt the FIDIC condition of contract because the condition clearly states on the clause.							
3	Do you recommend further adaption of this clause?							
		Yes	87%	80%	50%	80%	88%	77%
		No	13%	20%	50%	20%	13%	23%
III.	Procedure for claim							
1	Choice for this provision	FIDIC	47%	60%	50%	60%	75%	58%

		PPA	53%	40%	50%	40%	25%	42%
	a) Benefit of the mostly chosen							
	Clarity		67%	70%	50%	60%	100%	69%
	Time limit		47%	30%	50%	60%	88%	55%
	b) The other option							
	Overzealous contract administration		40%	40%	0%	20%	38%	28%
	Ambiguity in interpretation		33%	40%	50%	40%	75%	48%
2	What do you think about the intension to adopt this clause?							
	The common answer to this question was: Procedure for claim provided by both conditions are good but in PPA condition there should be some clear procedure.							
3	Do you recommend further adaption of this clause?							
		Yes	47%	60%	50%	60%	75%	58%
		No	53%	40%	50%	40%	25%	42%
IV.	Settlement of dispute							
1	Choice for this provision	FIDIC	53%	70%	50%	60%	75%	62%
		PPA	47%	30%	50%	40%	25%	38%
	a) Benefit of the mostly chosen							
	Carried by neutral arbitration law		80%	80%	0%	80%	100%	68%
	Time saving		67%	80%	100%	80%	75%	80%
	Clarity		100%	90%	100%	100%	88%	96%
	b) The other option							
	Carried by government body		87%	70%	50%	20%	25%	50%

2	What do you think about the intension to adopt this clause?							
	The common answer to this question was: It is good to adopt this clause from FIDIC because of its clarity, time saving and carried by neutral arbitration law.							
3	Do you recommend further adaption of this clause?							
		Yes	53%	70%	50%	60%	75%	62%
		No	47%	30%	50%	40%	25%	38%
V.	Change in Cost and Subsequent Legislation							
1	Choice for this provision	FIDIC	67%	70%	0%	40%	63%	48%
		PPA	33%	30%	100%	60%	38%	52%
	a) Benefit of the mostly chosen							
	Appropriate cost for item of work will be rendered		73%	80%	100%	80%	75%	82%
	Ensure Legitimacy		53%	50%	100%	80%	88%	74%
	b) The other option							
	Undermining Employer's Authority		0%	0%	0%	60%	13%	15%
2	What do you think about the intension to adopt this clause?							
	The common answer to this question was:							

3	Do you recommend further adaption of this clause?							
		Yes	67%	70%	0%	40%	63%	48%
		No	33%	30%	100%	60%	38%	52%

Table 4.4: General result of the above table

Item No.	Clause	Condition of Contract	Average Responses in %
I	The Engineer	FIDIC	87%
		PPA	73%
		Need For Further Adoption	28%
II	Variations	FIDIC	67%
		PPA	33%
		Need For Further Adoption	77%
III	Procedure for Claim	FIDIC	58%
		PPA	42%
		Need For Further Adoption	58%
IV	Settlement of Dispute	FIDIC	62%
		PPA	38%
		Need For Further Adoption	62%
V	Change in Cost and Subsequent Legislation	FIDIC	48%
		PPA	52%
		Need For Further Adoption	48%

On the above table shown the percentage varies or looks odd because some of the respondents chosen both FIDIC and PPA as well as further adoption clauses.

4.3 Discussion

Based on the responses given by different parties I have tried to discuss based on the above tables which is as follows for the chosen clauses.

I. The Engineer

A. Duties and Authority of the Engineer

Most of my respondents appreciated the provisions of FIDIC conditions of contracts by justifying as it provides flexibility of exercising authority of the Engineer; insure Employer's authority provides clarity, and it is appropriate decision making processes. But the Engineer is required to obtain the approval of the employer before exercising a specified authority; the requirements shall be as stated in the particular condition. Even if FIDIC provision has such strengths there is an argument by some of the respondents that giving full rights to the Engineer may lead to the abuse of power, on the other hand giving powers to the client may also minimize the authority of the engineer and cause loss of project control.

As my assessment shows the intention to adapt this clause to the new PPA's provisions was to protect the work but there should be some controlling mechanism. But it questions the Engineer's confidence since the Engineer has to go through the employer for approval on many of his authorities. This is a time taking process in light of the long approval processes. In addition it decreases the Employers involvement in decision making, if the power is fully given to the Engineer, even if the Employer is the financier. The ignorance of the Employer to participate in decision is likely to create a gap of information between the parties. It is more or less similar to FIDIC and it is appreciated its clarity but most of practically not applicable in Ethiopia.

According to the respondents 62% recommends further clause on duties and authorities of the Engineer.

On the other hand some of respondents say due to the lack provision of Duties and Authority of the Engineer, it becomes slow decision making process, undermine employers and engineer's Authority, it will be risky to the contractor and Employer.

B. Instruction in writing

FIDIC's approach on how to provide instruction in writing was preferred by many of my respondents since it gives advantage such as legitimacy assurance, clarity with respect to

procedural requirement and proper recording, and referencing of instruction in case of dispute or claim.

PPA clearly states that any communications between the Contractor and the Public Body or the Agency related to matters of alleged fraud or corruption must be made in writing only but for many cases it is not express specified, this makes it ambiguous. Therefore a very few respondents agreed on further adaptation of this clause in such a way that: it has to provide some form of oral instructions in the case of urgent conditions, which is to be confirmed in specific time frame in writing for documentation purpose.

C. Power of the Engineer to fix rate

The strength of FIDIC provisions, according to my study, is that it obliged the Engineer to notify the Employer in the case of disagreement concerning the price or rate of variations to protect the employer, facilitates timely payment, suitable for both parties. And also the Engineer has a power to fix a rate if:

- ✓ the measured quantity of the item is changed by more than 10% from the quantity of this item in the Bill of Quantities or other Schedule,
- ✓ this change in quantity multiplied by such specified ,
- ✓ for this item exceeds 0.01 % of the Accepted Contract Amount,
- ✓ this change in quantity directly changes the Cost per unit quantity of this item by more than 1% and,
- ✓ this item is not specified in the Contract as a "fixed rate item"

The short coming of the PPA's provision is if the contractor's quotation is unreasonable the Engineer will fix the rate. But in practice it is difficult to determine unreasonableness but the engineer will consult with the public body. Therefore, it is my recommendation that it has to provide criteria for unreasonableness and it is not only give the power to the Engineer to fix the unit price for modification order but also it should be for other works.

II. Alteration, Addition and Omission

Variations

Regarding to the provision of this paragraph on FIDIC most of my respondents agreed up on that whether explicitly stated or implied this provision is obviously understood and there for it has no

impact on practice. But in my opinion for the seek of clarity provisions in conditions of contract should be explicitly stated.

According to PPA, it is clearly stated on the condition but it needs some modification.

But in our country, according to some respondents, with variation issue there is almost increase in quantity due to lack of quantification or any other reason therefore it becomes open to cost overrun.

III. Procedure for claims

FIDIC conditions of contract have strengths such as procedural clarity and time limit provision to claim.

The new condition of contract, PPA does express on what way the claim will be asked by the contractor but it doesn't say anything about the time bound. It just says as soon as possible. And also has ambiguity in interpretation that's why the foreign contractors get much money from our country by raising different claims. Therefore our PPA should have to have further adaptation of this clause is recommended.

More than 50% of the respondents recommends for further adaption on this clause.

It has to be understood that clearly stated procedure for claim are important to mange properly when disputes arises, unless it is going to be difficult to handle it. And also one must understand that claims are unavoidable and hence one must be prepared to meet them.

IV. Settlement of Dispute

According to my assesement, FIDIC's provides that after once arbitration arises it has to be done in neutral arbitration law, it becomes time saving and it is clear.

According to PPA, if the dispute cannot be resolved by the Engineer and the Contractor's Contract Manager, in the second instance each of the Public Body and the Contractor shall appoint more senior representatives than those mentioned above to meet solely in order to resolve the matter in dispute. If the Parties fail to resolve such a dispute or difference amicably within twenty-eight (28) days from the commencement of such procedure, either party may require that the dispute be referred for resolution through the courts in accordance with Ethiopian Law. But most of the time, in our country it becomes time taking and costly.

It is clear that having free arbitration rule and impartial arbitrator create harmony environment among the contracting parties. Therefore as in the case of FIDIC it is better to settle dispute by Dispute Adjudication Board's.

And also more than 50% of my respondents recommend further adaption of this clause.

V. Change in Cost and Legislation

Increase or Decrease of Cost

According to the above table indicates FIDIC and PPA almost are more valuable and strong in that it allows adjusting appropriate cost for item of work by negotiation of the parties as stated in SCC and it assure legitimacy. Both conditions of contract provide mathematical formula for adjusting fluctuations in costs of inputs.

On the other hand some of my respondents recommend further detailed and clear adaption on the price adjustment system.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

This chapter gives conclusions and recommendations based on the results obtained and discussions made in the previous chapter.

Focusing to meet the objectives stated on chapter one, I tried to analyze the Conditions of contract in my desk study assessment and with feedback data's collected from interviewee questionnaires. Accordingly, I reached the following conclusions and recommendations.

5.1 Conclusions

Difficulties which hindered me from achieving general conclusions during my paper process are lack of sufficiently experienced interviewee on the paper topic, time bound and absence of project reports that are administered in FIDIC Conditions of Contract.

- Most of my respondents confirmed that FIDIC provisions are the one which clearly indicate the rights, obligations, and remedial rights of each contracting party and also clearly indicates Duties and Authority of the Engineer. It also considers the basis of contract such as having a separate clause for instruction in writing for proper record keeping to use it as a proper referencing during case of disagreement, dispute or any claim arises.
- Most of my respondents agreed that our local Conditions of Contract are adapted from international conditions of contract in such a way to keep government, public interests and also to substantiate control of the government financed projects.
- Since the establishment of the first Standard Conditions of Contract (Ministry of Housing in 1959) a number of conditions of contract had been drafted. But as my study populations shows, there are professionals still using the BaTCoDA 1987 and PPA 2006. This is because of the fact that local Conditions of Contract are not drafted continually and assessed their impacts in practical usage. Our condition of contract has information gap between the users, regarding the developments of Conditions of Contract.
- PPA Conditions of Contract partially tries to improve the gap that has been observed in the previous provisions, such as lack of provisions of Adjudicator for dispute resolutions, etc. Also, the new Conditions of Contract have some shortcomings such as pre-mobilization obligation, Design related obligation etc.

- My final conclusions I explore from analysis of the data shows that periodical adaptations of the General Conditions of Contract should be made to clearly assess the impact on the industry.

5.2 Recommendations

- My first recommendation is that, it is better to use or adopt FIDIC condition of contracts because it clearly states the relationship among the parties, obligations of the parties, liabilities of the parties and also it is internationally recognized and acceptable condition of contract.
- Workshops and trainings should be given continually to increase their awareness on areas of Standard Conditions of Contract in order to have a clear understanding or interpretation of the Conditions of Contract. In addition a more formalized training in colleges and institutions on the line of construction law must be given. And also the condition of contract of each clause should be discussed with experienced professionals.
- The contractual stake holders associations (contractors association, consultants association, financiers, government and other concerned bodies), if possible better to develop standard Conditions of Contract which has an equal meaning to international acceptance. This could minimize the risks and adversarial relationships.
- Even if a perfect set of Contract Documents were to be devised, there might still be disagreements and it is at large up to the participants of the project to develop integrated and comprehensive approaches and the same be incorporated in Contract document to resolve disputes and claims.
- The Engineers, Contractors, Consultants, Construction Managers, project managers and all other concerned professionals should closely examine and know the contract documents to minimize the consequences which lead to disagreement. Professional associations must also organize this effort of familiarization.
- FIDIC Conditions of Contract is recommended for general use in works subject to international tender. It has to be accepted, while preparing local Conditions of Contract that some Clauses shall be implemented generally and some should be modified depending on the features of the Work and location. The Clauses that shall be applied generally in the general Conditions of Contract, have been issued as facilitating as to be included and drawn up to the texts of Construction Contracts.

- It is clear that for a contract to be formal and valid proper record keeping of documents are important especially in the case of claim and dispute it will serve as evidence. Therefore conditions of contract has to have provisions that state instruction to be in writing clearly and for the case of urgent condition it has to allow some oral instruction to be confirmed later by the Engineer with definite time limit. Even if in our country doesn't have the trained to have site book on site.
- It is better to give rights to the Engineer by stating some particulars in the SCC is important to carry out his duties to complete the project within the time limit and with the required specification confidentially. And since the Employer is the financier he has to participate on final decision above a certain financial for very sensitive issues and time limits which stated on SCC.
- Also to give power to the Engineer to fix rate during disagreement is necessary to facilitate the work, and it has to participate the contractor and the Employer to do it in consultation to create better relationship among the parties. On the other hand it has time limit to ask for these. In addition a limit must however be put on how much of a given rates value an engineer can revise. (Percentage limit)
- The strength of PPA-2011 is that it is more elaborating each clause so that it may not be confusing in interpretation and comparing from the previous local condition of contracts it is better so by reforming the clauses.
- The Strength of FIDIC 1999 is that provides in international meaningful clause, its clarity and simply understandable so it's better to adopt this condition of contract.
- My final recommendation is that, further detailed study has to be conducted on the topic to clearly conduct holistic conclusions that all could explore a positive output.

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APPENDIX I
INTERVIEW QUESTION
ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY
SCHOOL OF ARCHITECTURE AND CIVIL ENGINEERING
DEPARTMENT OF CIVIL ENGINEERING
PROJECT INTERVIEW QUESTIONS

Dear Sir or Madam:

I am graduating class student of the Department of Civil Engineering specialized in Construction management and Technology Currently working on a graduation paper on the topic; “Comparison between FIDIC and PPA Condition of Contracts for the selected clauses” There are different Conditions of Contract in take up in Ethiopia, these are FIDIC 1999 and the new one PPA 2011 Conditions of Contract. The local conditions of contracts are adopted at different time and has some differences on their clauses theses differences may have an impact on the industry. Therefore identifying these things and assessing the impact is vital for the development of the industry.

I have tried to identify the difference of those conditions of contract and for the purpose of my study I have focused on some of the differences and grouped them.

Accordingly; the following clauses where identified as a major to consider my interview questions.

- The Engineer
- Alteration , Addition and Omission (Variations)
- Procedure of Claims
- Settlement of Disputes and
- Change in Cost and Subsequent Legislation

After taking these into Consideration, I am now at a stage of assessing the impacts,

As a result, I have prepared these interview questions and request your cooperation as practicing professionals in the construction industry, to supplement my desk study with your experiences and observations. Thus your most cooperation in answering the interview questions is much more appreciated.

For the simplicity of presentation I categorized this paper into two parts. Part I deals with description of major differences that considered in my interview and part II deals with interview questions.

Finally, I assure you that the information you shall provide me concerning my study is to be strictly used for academic purpose only.

PART I: The major differences between the two conditions of contract considered in my interview are listed in the table below.

I. The Engineer	
A. Duties and Authority of the Engineer	
FIDIC	<p>The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.</p> <p>The Engineer shall have no authority to amend the Contract.</p> <p>The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract. If the Engineer is required to obtain the approval of the Employer before exercising a specified authority, the requirements shall be as stated in the Particular Conditions. The Employer undertakes not to impose further constraints on the Engineer's authority, except as agreed with the Contractor.</p> <p>However, whenever the Engineer exercises a specified authority for which the Employer's approval is required, then (for the purposes of the Contract) the Employer shall be deemed to have given approval.</p> <p>Except as otherwise stated in these Conditions:</p> <p style="padding-left: 40px;">(b) whenever carrying out duties or exercising authority, specified in or implied by the Contract, the Engineer shall be deemed to act for the Employer:</p> <p>to relieve either Party of any duties, obligations or responsibilities under the Contract: and any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any</p>

	responsibility he has under the Contract, including responsibility for errors, omissions, discrepancies and non-compliances.
PPA	Except where otherwise specifically stated and subject to any restriction in the SCC, any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Public Body or the Contractor may be taken or executed by the Engineers named in the SCC. Except as expressly stated in the SCC, the Engineer shall not have authority to relieve the Contractor of any of his obligations under the Contract. (Sub clause 12.1)
B. Instruction in Writing	
FIDIC	<p>Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices and requests, these communications shall be:</p> <ul style="list-style-type: none"> ➤ In writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Appendix to Tender: (sub clause 1.3)
PPA	State that Any communications between the Contractor and the Public Body or the Agency related to matters of alleged fraud or corruption must be made in writing. (Sub clause 5.7)
C. Power of the Engineer to fix rates	
FIDIC	The Engineer shall exercise such discretion impartially within the terms of the Contract and having regard to all the circumstances. It is clearly stated in the condition of contract. (Sub clause 12.3)
PPA	<p>The prices for all modifications ordered by the Engineer in accordance with GCC Clause 15.2 and 15.4 shall be ascertained by the Engineer in accordance with the following principles:</p> <ul style="list-style-type: none"> a) where work is of similar character and executed under similar conditions to work priced in the bill of quantities or price schedule it shall be valued at such rates and prices contained therein; b) Where work is not of a similar character or is not executed under similar conditions, the rates and prices in the contract to be agreed through negotiation between the Engineer and the Contractor shall conform to the prevailing market

	<p>price;</p> <p>c) if the nature or amount of any modification relative to the nature or amount of the whole of the contract or to any part thereof shall be such that in the opinion of the Engineer any rate or price contained in the contract for any item of work is by reason of such modification rendered unreasonable, then the Engineer shall fix such rate or price as in the circumstances he shall think reasonable and proper;</p> <p>d) Where a modification is necessitated by default or breach of contract by the Contractor, any additional cost attributable to such modification shall be borne by the Contractor.(clause 15)</p>
II. Alteration, Addition and Omission	
➤ Variation	
FIDIC	It is clearly stated in the condition of contract. (Sub-Clause 13.1)
PPA	The Engineer shall have power to order any modification to any part of the works necessary for the proper completion and /or functioning of the works. Such modifications may include additions, omissions, substitutions, changes in quality, quantity, form, character, kind, position, dimension, level or line and changes in the specified sequence, method or timing of execution of the works. No order for a modification shall have the effect of invalidating the contract, but the financial effect, if any, of all such modifications shall be valued in accordance with GCC Clauses 15.5 and 15.7. (Sub clause 15.1)
III. Procedure for Claims	
FIDIC	If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance. It is detailed on sub clause 20.1
PPA	The Contractor shall warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work increase the Contract Price or delay the execution of the Works. The

	Engineer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible. (sub-clause 77.1)
IV. Settlement of Dispute	
FIDIC	It is clearly and detail stated in the condition of contract. (sub-clause 20.2-20.8).
PPA	<ul style="list-style-type: none"> - If a dispute arises between the Public Body and the Contractor in relation to any matter which cannot be resolved by the Engineer and the Contractor's Contract Manager either of them may refer such dispute to the procedure described in GCC Sub-Clause 26.4. (Sub-Clause 26.3) - In the second instance each of the Public Body and the Contractor shall appoint more senior representatives than those referred to in Sub-Clause 26.3 to meet solely in order to resolve the matter in dispute. Such meeting(s) shall be minute and shall be chaired by the Public Body (but the chairman shall not have a casting vote). Such meeting(s) shall be conducted in such manner and at such venue (including a meeting conducted over the telephone) as to promote a consensual resolution of the dispute in question at the discretion of the chairman. (Sub-Clause 26.4) - If the Parties fail to resolve such a dispute or difference amicably within twenty-eight (28) days from the commencement of such procedure, either party may require that the dispute be referred for resolution through the courts in accordance with Ethiopian Law. (Sub-Clause 26.5) - Only those Public Bodies that are allowed by law to proceed to arbitration can do so. (Sub clause 26.6)
V. Changes in Cost and Legislation	
FIDIC	States that it shall be added to or deducted from the contact price such sums in respect of rise or fall in the cost labor and/or materials or any other matters affecting the cost of the execution of the works as may be determined in accordance with part II of these conditions. (Sub-Clause 13.8)
PPA	The Public Body can increase or decrease the Contract Price amount as described by this Clause. (Sub-clause 62.4)

	An adjustment of the Contract Price, depending of selected categories of contract price, shall be limited to an amount which takes account of price indexes or price indicators issued by Ethiopian Central Statistical Agency or Public Procurement and Property Administration Agency. (Sub-clause 62.8)
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PART 2: Questions

I. Engineer and Engineer's Representative

A. Duties and Authority of the Engineer

1. From the condition of contract below which provision do you prefer concerning this clause?

Options	Choice	Why?
FIDIC		
PPA		

a. What benefit do you think your choice provides? please tick ✓

- ☐ Provides Flexibility
- ☐ Provides Clarity
- ☐ Ensure Employer's Authority
- ☐ Ensure Engineer's Authority
- ☐ Appropriate Decision Making process
- ☐ Control project cost and time

Specify if any _____

b. What do you consider on the other option?

- ☐ Slow decision making process
- ☐ Undermining Employer's Authority
- ☐ Undermining Engineer's Authority
- ☐ Embody ambiguity
- ☐ Risky to the Contractor
- ☐ Risky to the Employer
- ☐ Dependence on Employer Consent

Specify if any _____

2. What do you think about the motives to adopt this clause?

3. Do you recommend further adaptation of any clauses? Yes ☐ OR No ☐

If Yes, in what way? _____

B. Instruction in Writing

1. From the condition of contract below which provision do you prefer concerning this clause?

Options	Choice	Why?
FIDIC		
PPA		

a. What benefit do you think your choice provides?

- ☐ Ensure Legitimacy
- ☐ Clarity with respect to procedural requirements
- ☐ Proper recording and referencing of instructions

Specify if any _____

b. What do you consider on the other option?

- ☐ Too formality - Difficulty for urgent condition
- ☐ Time taking process

Specify if any _____

2. What do you think about the motives to adopt this clause?

3. Do you recommend further adaptation of this clause? Yes ☐ OR No ☐

If Yes, in what way? _____

C. Power of the Engineer to fix rates

1. From the condition of contract below which provision do you prefer concerning this clause?

Options	Choice	Why?
FIDIC		
PPA		

a. What benefit do you think your choice provides?

- ☐ Protect the Employer
- ☐ Facilitate timely payment
- ☐ Good for both the employer and contractor

Specify if any _____

b. What do you consider on the other option?

- ☐ Maximize disagreement

Specify if any. _____

2. What do you think about the motives to adopt this clause?

3. Do you recommend further adaptation of this clause? Yes ☐ OR No ☐

If Yes, in what way? _____

II. Alteration, Addition and Omission

• Variations

1. From the condition of contract below which provision do you prefer concerning this clause?

Options	Choice	Why?
FIDIC		
PPA		

a. What benefit do you think your choice provides?

- ☐ To manage uncertainty

Specify if any. _____

b. What do you consider on the other option?

- ☐ Open to cost overrun

Specify if any. _____

2. What do you think about the motives to adopt this clause?

3. Do you recommend further adaptation of this clause? Yes ☐ OR No ☐

If Yes, in what way? _____

III. Procedure for claims

1. From the condition of contract below which provision do you prefer concerning this clause?

Options	Choice	Why?
FIDIC		
PPA		

- a. What benefit do you think your choice provides?

☐ Clarity

☐ Time limit

Specify if any. _____

- b. What do you consider on the other option?

☐ Over zealous contract administration

☐ Ambiguity in interpretation

Specify if any. _____

2. What do you think about the motives to adopt this clause?

3. Do you recommend further adaptation of this clause? Yes ☐ OR No ☐

If _____ Yes, _____ in _____ what _____ way?

IV. Settlement of Disputes

1. From the condition of contract below which provision do you prefer concerning this clause?

Options	Choice	Why?
FIDIC		
PPA		

- a. What benefit do you think your choice provides?

☐ Carried by neutral arbitration law

☐ Time saving

☐ Clarity

Specify if any. _____

b. What weakness due you consider on the other option?

☐ Carried by government body

Specify if any _____

2. What do you think about the motives to adopt this clause?

3. Do you recommend further adaptation of this clause? Yes ☐ OR No ☐

If Yes, in what way? _____

V. Change in Cost and Subsequent Legislation

Increase or decrease of Cost

1. From the condition of contract below which provision do you prefer concerning this clause?

Options	Choice	Why?
FIDIC		
PPA		

a. What benefit do you think your choice provides?

☐ Appropriate cost for item of work will be rendered

☐ Ensure Legitimacy

Specify if any. _____

b. What do you consider on the other option?

☐ Undermining Employer's Authority

Specify if any. _____

2. What do you think about the motives to adopt this clause?

3. Do you recommend further adaptation of this clause? Yes ☐ OR No ☐

If Yes, in what way? _____